DOCUMENT RESUME

ED 086 847 95 CE 000 881

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TITLE Engineering Drafting; Glossary of Key Words. Vocational Reading Power Project, Title III, E.S.E.A.

INSTITUTION Oakland County Schools, Pontiac, Mich.
SPONS AGENCY Bureau of Elementary and Secondary Education (DHEW/OE), Washington, D.C.; Michigan State Dept. of Education, Lansing.
REPORT NO MDE-0671
PUB DATE Nov 72
NOTE 25p.; For related documents, see CE 000 872-880; CE 000 882-891

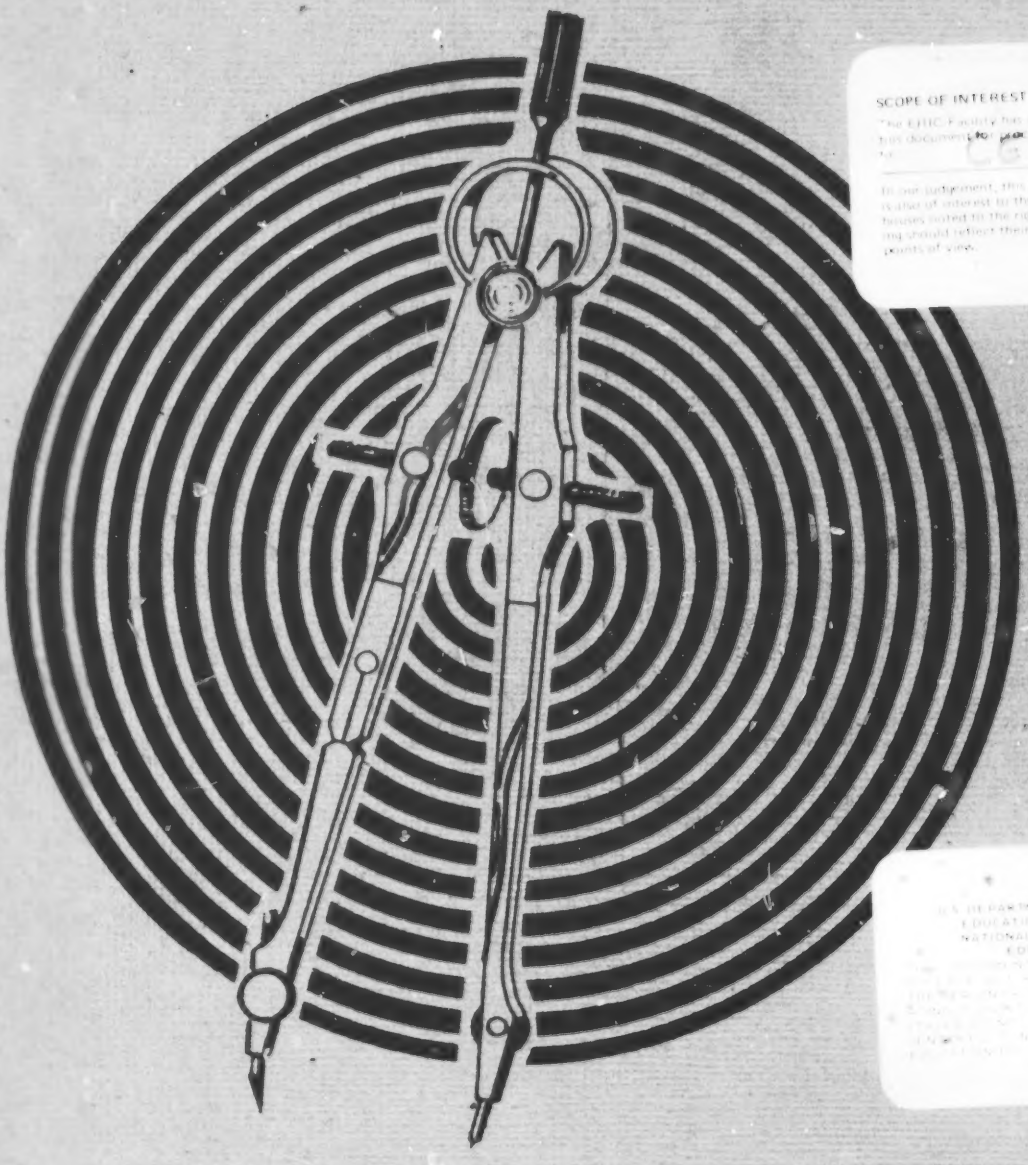
EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Definitions; *Engineering Drawing; *Engineering Graphics; *Glossaries; *Technical Education; Vocational Education
IDENTIFIERS Elementary Secondary Education Act Title III; ESEA Title III

ABSTRACT

The glossary is one of twenty in various subject areas of vocational education designed to assist the student in vocabulary mastery for particular vocational education courses. They are part of the Vocational Reading Power Project, Title III, E.S.E.A. This glossary is for a course in engineering drafting. It is divided into two parts: one provides the student with two definitions for each term listed; the second part lists the same words with space for the student's definition. It is intended that upon completion of the course, mutually agreeable definitions for each term will be arrived at by the instructor and the students. These definitions will be made available to future students taking the course. (AG)

ED 026317

ENGINEERING DRAFTING
Glossary of Key Words



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NATIONAL INSTITUTE OF EDUCATION

Vocational Reading Power
E.S.E.A. Title III

CE000 881

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The preparation of this material was
supported by U.S.O.E. Grant: M.D.E. 0671

November, 1972

To The Student

This Glossary of Key Words was prepared to help you in your course. The words that follow were judged by your instructor to be the most important for you to understand.

Directions

The Glossary is divided into two parts. The first part lists the key words at the left side of the page. Across from the key words are two definitions for that word. The "A" definition is more difficult and specific. The "B" definition is easier and more general. During a learning activity, you are to use both definitions to help you understand. After the learning activity, you are to write your definition of the word as you understand it.

The second part just lists words. There is space for you to write your understanding of those words. Also, at the end of the booklet are blank lines. Here, you and your instructor will list and define the words which were left out.

At the end of the course, your definitions and the instructor's definitions will be joined together. These will be printed and given to the students who come after you have graduated. It is hoped that, with your help, the future students of vocational education will be greatly benefited.

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a) PRIMARY
b) SECONDARY

ACCELERATION	a) The rate at which the velocity of a body changes in a unit of time. b) The rate of increase of speed.
ADJACENT	a) Two angles having the same vertex and having a common side between them. b) Two objects shaping a common side.
ALIGNMENT	a) The justification of a series of objects so as to cause them to be ordered in relation to a specific axis. b) An arrangement in a line.
ALLOWANCE	a) An allowance is an intentional difference in correlated dimensions of mating parts. It is the minimum clearance or the maximum interference between such parts. b) An intentional difference in dimensions between mating parts.
ANGLE	a) The space within two lines diverging from a common point or vertex. b) A figure formed by two lines meeting at a common point.
ARBOR	a) A bar or shaft used to support either the work or the cutting tools during a machining process. b) A beam, shaft or spindle.
ARC	a) Any part of a circle or curved line. b) A part of a circle.
AREA	a) The amount of surface plane or curve which is two-dimensional in extent. b) Any surface contained by boundaries.
ASSEMBLY	a) An assembly or assembly drawing showing the various parts of a machine assembled in their relative positions. b) A drawing showing the product in its completed state.
AUXILIARY	a) An additional view of parts of an object that are inclined to be one of the coordinate planes made by a projection on a plane parallel to the object. b) A view drawn so as to show the true shape of an inclined surface.

ACCELERATION

ADJACENT

ALIGNMENT

ALLOWANCE

ANGLE

ARBOR

ARC

ARCA

ASSEMBLY

AUXILIARY

a) PRIMARY
b) SECONDARY

AXIS	a) (Axis of Rotation) An imaginary line around which parts rotate or are regularly arranged. b) The center line of a shaft such as a wheel axle about which the wheel rotates.
BAFFLE	a) A plate, reflector or obstruction for checking and deflecting the flow of air, gases and sound. b) A plate or partition to change the direction of a fluid.
BONDED	a) (Bond Paper) A general class of hard, tough drawing paper of poor transparency. b) Same a) When two or more objects are joined together with a cement. b) Same
BOLT	a) A strong metal pin, often with a head at one end and with a screw thread at the other to receive a nut. b) The assembly formed by a machine screw and corresponding nut.
BORE	a) An accurate hole produced by the process of boring whereby a boring bar is used to form the hole. b) A hole for a shaft.
BRACKET	a) A wooden, metal, etc., support of triangular outline placed under a shelf or the like. b) Same
BRAZING	a) Making an adhesion between two close fitting metal parts by using a low melting point brazing alloy. As the metal parts are heated the brazing metal is drawn into the joint by capillary action. b) To join together by a hard solder usually consisting of a copper and zinc alloy.
BUSHING	a) A lining for a hole made of a bearing material for the express purpose of giving support to a rotating member or shaft. b) Same
CAM	a) A machine element designed to generate a desired motion to a follower by means of direct mechanical contact. b) A device used to change a rotating motion to some other pattern of motion.

AXIS

BAFFLE

BONDED

BOLT

BORE

BRACKET

BRAZING

BUSHING

CAM

a) PRIMARY
b) SECONDARY

C'BORE	a) (Counterbore) The process of enlarging a hole to a definite depth. b) Same
CENTRE (CENTER)	a) The point at which the locus of all points are equally distant. b) The middle point.
CENTRIFUGAL	a) That force which tends to impel a thing, or parts of a body, outward from a center of rotation. b) That action which causes a body to want to continue in a straight line when it is forced into a turn.
CHAMFER	a) An oblique surface cut on the edge or corner of a solid, usually a board, made by removing the arris and usually sloping at 45°. b) A beveled edge or corner, a groove.
CIRCUIT	a) The complete path of a current including the generating apparatus or other source. b) A grouping of items in a path so as to be completed.
CIRCULAR	a) Having the form of a round shape. b) Same
CIRCUMFERENCE	a) The length of the outer boundary especially of a circular area. b) The length of the distance around a circle.
CLEARANCE	a) The distance by which one object clears another. b) The space between two parts.
CONSTRUCT	a) As related to the process of drawing, with instruments, so as to form geometric forms and shapes, not allowing the use of any measurement with a scale. b) Same
COUNTERSINK	a) To form a conical depression in the top of a hole, usually to receive the head of a flat head screw. b) To enlarge the top portion of a hole in the shape of a cone.
CRANE	a) A machine for raising, shifting and lowering heavy weights, commonly by means of a projecting swinging arm. b) Same

C'BORE

CENTRE (CENTER)

CENTRIFUGAL

CHAMFER

CIRCUIT

CIRCULAR

CIRCUMFERENCE

CLEARANCE

CONSTRUCT

COUNTERSINK

CRANE

a) PRIMARY
b) SECONDARY

DEGREE	a) A 360th part of the circumference of a circle, or of a round angle. b) Same
DETAIL	a) A drawing which completely describes the shape size, and location of all the geometric characteristics of a single part so as to afford its complete manufacture. b) A drawing which describes a single part.
DEVELOPMENT	a) A drawing such as a pattern, which indicates a surface which can be rolled out or unfolded without distortion. b) Refers to the unfolding of the surfaces of an object.
ELEVATION	a) A geometrical projection on plane perpendicular to the horizon. b) A term used in orthographic projection to designate a front view.
FOLLOWER	a) (Cam Follower) A machine element which traces the motion generated by the surface of a cam path. b) A machine part which rolls or slides against the surface of a cam.
FORGE	a) To shape hot or cold metal by hand or machine. b) Same
FORGINGS	a) Operation or process of bending, drawing, spreading and upsetting of metal to form a specified shape and size, usually requiring considerable pressure and large equipment. b) A Process of forming a shape in metal by the use of pressure rather than by cutting.
JOINT	a) A connection between two or more pieces made to be as one by the process of welding or other forms of adhesion. b) The point at which two parts are welded together.
JUMPER	a) Usually a short connection which is utilized in a circuit to bypass between two points. b) Same

DEGREE

DETAIL

DEVELOPMENT

ELEVATION

FOLLOWER

FORGE

FORGINGS

JOINT

JUMPER

a) PRIMARY
b) SECONDARY

KNURL	a) The geometric configuration produced on a part, due to the process of embossing the surface of the part with a knurling tool so as to cause a plastic deformation of the metal. b) A textured surface (usually on tool handles) on a part or tool.
LAYOUT	a) The working drawing of a job or project from which the finished details and assembly drawings are produced. b) A working drawing of a job.
LIMITS	a) The maximum and minimum permissible sizes of a part. b) Same
MACHINABILITY	a) As related to metals is the ease at which the metal is cut. It is graded on a scale utilizing a free-machining steel (leaded steel) as the base. b) How easy metal is cut.
MOCKUP	a) A mechanical device simulating an actual machine or part, used as a training device. b) Same
MODEL	a) A miniature representation of a thing, sometimes a facsimile. b) Same
PRODUCT	a) Item manufactured for the expressed purpose of marketing for the profit motive. b) Same
REAM	a) The operation of sizing and finishing the inside of a drilled or cored hole smoothly and accurately, using a cutting tool called a reamer which has several cutting edges. b) The process of sizing a hole to a specified diameter.
REPRODUCTION	a) A process for the creation of one or more copies of the original drawing utilizing a print machine. b) To copy.
RETAINER	a) A mechanical device for the expressed purpose of holding a mechanical sub-assembly or assembly in proper proximity until it is purposely removed for disassembly purposes. b) A device used to hold back or support.

KNURL

LAYOUT

LIMITS

MACHINABILITY

MOCKUP

MODEL

PRODUCT

REAM

REPRODUCTION

RETAINER

a) PRIMARY
b) SECONDARY

RIVET	a) A metal pin or bolt for passing through holes in two or more plates or pieces to hold them together, usually made with a head at one end, the other end being hammered into a head after insertion. b) Bolts or pins used to fasten plates together.
SCALE	a) An object which is graduated linearly for the express purpose of laying off or plotting measurements to actual reduced or enlarged sizes. b) An instrument with graduated spaces for measuring, etc.
SCHEMATIC	a) A diagram of an electrical or electronic circuit showing electrical connections and identification of various components. b) A diagram.
SECTION	a) (Sectional View) One whereby a cross-section of an object is obtained by passing an imaginary cutting plane through the object. The cutting plane is assumed to pass through at some selected portion of the object and the cut part is removed. b) A view of a drawing where the object is drawn as if it were cut apart.
SPOTFACE	a) A machined circular cut concentric about a hole for the purpose of furnishing a smooth surface for the head of a bolt or nut. b) A round machined cut about a hole to make a smooth seat for the head of a screw.
STUD	a) A screw threaded on both ends so as to afford its insertion into a tapped hole in which it is made semi-permanent. b) A screw threaded on both ends.
TOLERANCE	a) The total amount that a specific dimension by definition, may vary and still be within acceptable limits. b) The amount of variation permitted in the size of a part.
TYPICAL	a) (Typ.) When used as a note on a drawing, it means that the item marked typical will be the same wherever else the same item appears. b) An item always the same.

RIVET

SCALE

SCHEMATIC

SECTION

SPOTFACE

STUD

TOLERANCE

TYPICAL

a) PRIMARY
b) SECONDARY

WASHER

a) A ring of metal, leather, or other material or a perforated plate, used for various purposes as around a bolt or screw to form a seat for the head or nut.
b) Same

YOKE

a) A clamp that embraces two other parts to hold them in place.
b) The top member of a window frame.

WASHER

YOKE

Abscissa

Angular Clearance

Angular Displacement

Arrowheads

Assembly Drawing

Assembly Design

Assembly Detailed

Assembly Exploded

Assembly Half-Section

Assembly Installation

Assembly Isometric

Assembly Sub-Assemblies

Axes of Projection

Axes, Horizontal

Axes, Receding

Axes, Vertical

Axonometric

Bill of Materials

Break Line

Broken-Out Section

Center Distance

Center Line

Clearance Hole

Cross-Hatching

Cumulative Tolerances

Cutting Plane

Datum Dimensioning

Datum Line

Diagram

Dimension Line

Dimetric Drawing

Drawing Standards

Drawings

Dutch Projection

Fillet

Finish

Fits

Graphic Diagrams

Half Section

Holes

Holes, Blind

Holes, Clearance

Holes, Pilot

Inclined Surfaces

Isometric

Leaders

Lines

Lines, Base

Lines, Break

Lines, Broken

Lines, Center

Lines, Construction

Lines, Cutting-Plane

Lines, Dash

Lines, Datum

Lines, Dimension

Lines, Extension

Lines, Guide

Lines, Hidden

Lines, Object

Lines, Phantom

Lines, Pitch

Lines, Receding

Lines, Reference

Lines, Viewing

Machining Symbols

Oblique

Orthographic

Partial View

Parting Line

Parts List

Pattern Drawing

Perspective Drawing

Projection

Removed View

S-Break

Section Lining

Section Lining, Size

Section Lining, Basic

Section Lining, Nominal

Surface Finish

Symmetry, Axes of

Title Block

Unidirectional

View

Working Drawings